Version 1.01 | 09/18/2014





# **User Manual**

## **Music Everywhere**

DCH-M225

# Preface

D-Link reserves the right to revise this publication and to make changes in the content hereof without obligation to notify any person or organization of such revisions or changes.

### **Manual Revisions**

Revision	Date	Description	
1.0	May 2, 2014	Initial release	
1.01	September 18, 2014	• add Power Usage	

## Trademarks

D-Link and the D-Link logo are trademarks or registered trademarks of D-Link Corporation or its subsidiaries in the United States or other countries. All other company or product names mentioned herein are trademarks or registered trademarks of their respective companies.

Copyright © 2014 by D-Link Corporation. All rights reserved. This publication may not be reproduced, in whole or in part, without prior expressed written permission from D-Link Systems, Inc.

## **Power Usage**

This device is an Energy Related Product (ErP) with High Network Availability (HiNA), and automatically switches to a power-saving Network Standby mode within 1 minute of no packets being transmitted. If it is not needed during certain periods of time, it can be unplugged to save energy. **Network Standby**: 1.47 watts

# **Table of Contents**

Preface	•
Manual Revisions	•
Trademarks	•
Power Usage	••
Product Overview	1
Package Contents	. 1
System Requirements	2
Introduction	3
Features	3
What is Music Everywhere?	Z
What is a Wireless Extender?	Z
Hardware Overview	5
Front/Top	5
Side and Bottom	.6
Wireless Installation Factors	. 7
Setting Up Your DCH-M225	8
QRS Mobile App Setup	9
Playing you Music wirelessly to your Speakers1	3
Web-based Configuration1	7
Setup Wizard 1	8
Using the WPS Method2	
Using the Manual Method2	
Home Screen2	
Wi-Fi Settings2	
Extended Wi-Fi Settings2	27

Audio Renderer28
Network Settings
Advanced Settings29
Maintenance
Admin
System
Upgrade
Statistics
Connecting a Wireless Client
WPS Button
Connect to a Wireless Network
Windows <sup>®</sup> 837
WPA/WPA2
Windows <sup>®</sup> 739
WPA/WPA2
Windows Vista <sup>®</sup> 42
WPA/WPA243
Windows <sup>®</sup> XP45
WPA/WPA246
Troubleshooting48
Wireless Basics
Tips51
Technical Specifications

# Product Overview Package Contents



DCH-M225 Music Everywhere



#### Wi-Fi Configuration Card

If any of the above items are missing from your package, please contact your reseller.

# **System Requirements**

Network Requirements	<ul> <li>A wireless router with an active Internet connection.</li> <li>IEEE 802.11n, 802.11g, or 802.11b wireless clients/devices</li> </ul>
Web-based Configuration Utility Requirements	<ul> <li>Computer or Mobile Device with the following: <ul> <li>A Windows<sup>®</sup>, Macintosh, Android, or Linux-based operating system</li> <li>Wireless adapter or Wi-Fi functionality</li> </ul> </li> <li>Browser Requirements: <ul> <li>Internet Explorer 7 or later</li> <li>Firefox 12.0 or later</li> <li>Safari 4 or later</li> <li>Google Chrome 20.0 or later</li> </ul> </li> </ul>

## Introduction Features

#### **Conveniently Stream Audio**

Music Everywhere (DCH-M225) allows you to play music from your smartphone, tablet or computer wirelessly to your speakers. Simply plug in your speaker jack into Music Everywhere (DCH-M225) and connect it to your Wi-Fi network. It also has a Wi-Fi extender built-in to help you eliminate any Wi-Fi black spots in your home. If you do not have access to a Wi-Fi network, you can also use the direct connect mode to play music wirelessly, which connects your smart phone, tablet or computer directly to Music Everywhere.

#### **Easily Extend Your Existing Network and Audio Setup**

The DCH-M225 Music Everywhere is also a portable plug-in repeater that lets you extend an existing wireless network. It also has the ability to stream your music library to anywhere within your extended wireless network. Tiny yet powerful, it supports Wireless N speeds of up to 300 Mbps in a device that fits in the palm of your hand.

#### **Compact, Convenient Design**

The DCH-M225 's compact design is ideal for use at home or a small office, as it does not take up much space and is ready to use by simply plugging it in. The repeater's small form means it can easily be plugged into a power outlet without blocking other outlets while its wall wart design saves you the hassle of dealing with a power cord. Its sleek, unobtrusive appearance means it blends easily into the background.

#### **Simple Setup**

Through its easy-to-use web-based user interface, you can quickly and easily connect the DCH-M225 to an uplink router, configure the extender wireless network, and manage the administrative settings. The setup wizard will even guide you through the setup process, getting your extended wireless network up and running in no time.

<sup>\*</sup> Maximum wireless signal rate derived from IEEE Standard 802.11n and 802.11g specifications. Actual data throughput will vary. Network conditions and environmental factors, including volume of network traffic, building materials and construction, and network overhead, lower actual data throughput rate. Environmental conditions will adversely affect wireless signal range.

## What is Music Everywhere?

Music Everywhere (DCH-M225) allows you to play music from your smartphone, tablet or computer wirelessly to your speakers. Simply plug in your speaker jack into Music Everywhere (DCH-M225) and connect it to your Wi-Fi network. It also has a Wi-Fi extender built-in to help you eliminate any Wi-Fi black spots in your home. If you do not have access to a Wi-Fi network, you can also use the direct connect mode to play music wirelessly, which connects your smart phone, tablet or computer directly to Music Everywhere.

Expanding your audio capabilities has never been easier with the help of the DCH-M225. With support for both DLNA and AirPlay, simply plug in your speakers and you'll be able to stream audio to anywhere within your wireless network. The Wi-Fi WMM quality of service protocol ensures that you'll have no issues with bandwidth when streaming audio and performing other tasks such as surfing the Internet, checking email, or online gaming.

## What is a Wireless Extender?

The DCH-M225 acts as a repeater to extend the range of an existing wireless network to provide better signal for parts of your home or office that may have poor or no reception. Your existing wireless signal will be re-broadcast by the DCH-M225, allowing you to reach the farthest corners of your home or office. The extended network can simply use the same network credentials as the existing network, or you can specify a different network name and password, giving you the flexibility to control network access.

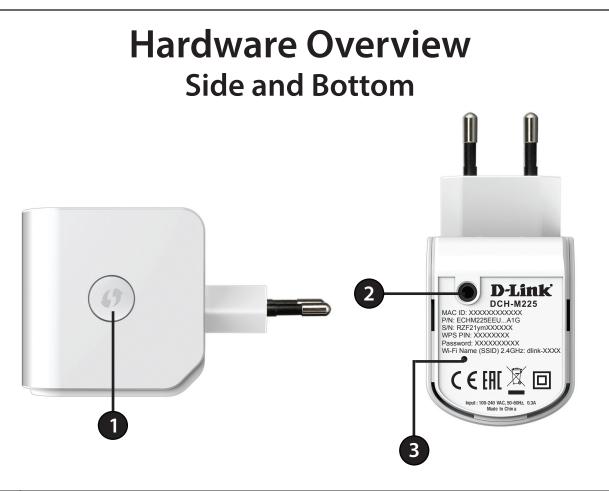
This purpose of this product is to create a constant network connection for your devices. As such, it does not have a standby mode or use a power management mode. If you wish to power down this product, please simply unplug it from the power outlet.

## Hardware Overview Front/Top



1	LED Indicator	This indicates the current status of the DCH-M225, as detailed in the table below.
---	---------------	--

LED Indicator	Colour	Status	Description
	Green	Solid Green	The device is powered ON and operating normally
		Blinking Green	The device is processing WPS
Power/Status	Red	Solid Red	Device is powering ON or system is defective
i owei/status	Red	Blinking Red	The device is in recovery mode or the device has malfunctioned
	Orange	Blinking Orange	Cannot connect or provision an IP address from the uplink router
	None	Off	Device is not receiving power. Check the power outlet



1	WPS Button	Pressing the WPS button for 1 second allows you to connect with Wi-Fi clients using Wi-Fi Protected Setup
2	Audio Line Out	Audio line out jack for connecting an external speaker
3	Reset Button	Pressing the reset button will reset the DCH-M225 to the factory default settings

# **Wireless Installation Factors**

The Music Everywhere lets you extend the reach of your existing wireless network, allowing you to work wirelessly from more places in your home or office. Keep in mind, however, that the number, thickness, and location of walls, ceilings, or other objects that the wireless signals must pass through, may limit the range. Typical ranges vary depending on the types of materials and background RF (radio frequency) noise in your home or business. The key to maximizing wireless range is to follow these basic guidelines:

- 1. Keep the number of walls and ceilings between the extender and other network devices to a minimum each wall or ceiling can reduce your adapter's range by up to 98 feet (30 meters). Position your devices so that the number of walls or ceilings is minimized.
- 2. Be aware of the direct line between network devices. At a 45-degree angle, a wall that is 0.5 meters thick (1.5 feet) appears to be almost 1 meter (3 feet) thick. At a 2-degree angle it can appear over 14 meters (45 feet) thick! Position devices so that the signal will travel straight through a wall or ceiling (instead of at an angle) for better reception.
- 3. Building materials make a difference. A solid metal door or aluminium studs may have a negative effect on range. Try to position access points, wireless routers, and computers so that the signal passes through drywall or open doorways. Materials and objects such as glass, steel, metal, walls with insulation, water (fish tanks), mirrors, file cabinets, brick, and concrete can degrade your wireless signal.
- 4. Keep your product away (at least 3-6 feet or 1-2 meters) from electrical devices or appliances that generate RF noise.
- 5. If you are using 2.4 GHz cordless phones or X-10 (wireless products such as ceiling fans, lights, and home security systems), your wireless connection may degrade dramatically or drop completely. Make sure your 2.4 GHz phone base is as far away from your wireless devices as possible. The base transmits a signal even if the phone in not in use.

# **Setting Up Your DCH-M225**

Plug in the DCH-M225 to a power outlet. Verify that the power LED is blinking orange before continuing.

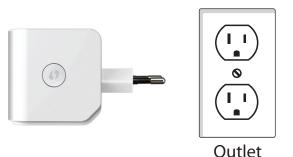
Locate the Wi-Fi name (SSID) and password for your DCH-M225 device. These details are printed on the specification sticker on the underside of the device. Using your computer or mobile device's Wi-Fi connection utility, connect to the SSID of your DCH-M225 and enter the password. If you are unsure of how to connect to a wireless network, please refer to "Connect to a Wireless Network" on page 37, or consult your device's user manual. Once connected, you are ready to begin the setup process.

There are two ways to configure your DCH-M225; using the QRS Mobile app on your smartphone or tablet device, or using the web GUI on your computer.

For detailed information on either of the methods for configuring your DCH-M225, refer to the following sections of the manual:

- "QRS Mobile App Setup" on page 9
- "Web-based Configuration" on page 17





# **QRS Mobile App Setup**

The DCH-M225 can be set up from your iOS or Android smartphone or tablet device using the QRS Mobile app.

Search for "QRS Mobile" in the App Store or Google Play, or use your mobile device to scan the QR codes on the right to download the QRS Mobile app from the App Store (left) for your iOS device, or from Google Play (right) for your Android device.

Connect to the Wi-Fi Configuration Card in Then, enter the Wi-Configuration Card (ex on the specification st

i network that is displayed on the Wi-Fi	iPad 중 Settings	
ncluded in your package (ex: dlink-a8fa).	Airplane Mode OFF	Wi-F
-Fi password also printed on the Wi-Fi	Notifications	Choo
x: <b>akbdj1936).</b> These details are also printed	Location Services On	72 Ch
ticker on the underside of the device.	Picture Frame	Ci
	General	√ dli dli
	iCloud	dli



For iOS



For Android

Pad 🗢	3:49 PM Wi-Fi Networks	Not Charging
Airplane Mode	in The works	
Wi-Fi dlink	Wi-Fi	
Notifications	Choose a Network	
Location Services On	7245 6100	₽ 🌫 📀
Brightness & Wallpaper	Chocolate	<del>ç</del> 📀
Picture Frame	Cisco_WPS_87366	₽ 🗢 📀
General	√ dlink	≂ 📀
Cloud	dlink-605L	₽ 🗢 📀
Mail, Contacts, Calendars	dlink-DIR505	₽ 🗢 📀
Twitter	DSR-500N_1	₽ 🗢 💿
S FaceTime	fc75167bb3ab	₽ 🗢 📀
Safari	Firefly	₽ 🗢 📀
	DW	a 🕿 🕥

Once your mobile device is connected, tap on the **QRS Mobile** icon.



Click Start to continue.

Pad 중 2:56 PM	87 % 📼
D-Link QRS Mobile	
Welcome	
This wizard will guide you through a step-by-step process to configure your new D-Link device.	
Step 1: Configure your Internet Connection	
Step 2: Configure your Wi-Fi Security	
Step 3: Set your router password Detecting device	
Step 4: Save settings	
Start	
 ?	

QRS Mobile will first detect your DCH-M225, then scan for available Wi-Fi networks. Select the network you wish to extend and enter the password if required.



Enter a network name (SSID) and password for the extended Wi-Fi network. You may keep the existing SSID and password if you wish. Click **Next** to continue.

Create an admin password for the DCH-M225's Web-based configuration utility. Click **Next** to continue.

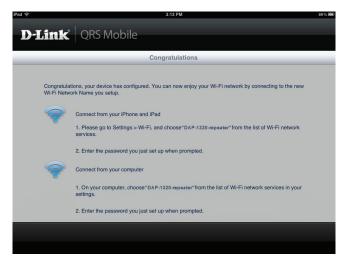


iPad 🗢 2:06 PM	91 % 🖿
D-Link QRS Mobile	
Wi-Film Device Password	
By default, your new D-Link device does not have a password configured for administrator access to the Web- based configuration utility. To secure your new device, please create a password below.	
Device Password:	
You will need to use the password to login the Web-based configuration utility of your device.	
Next >	
Next >	
<u></u>	

A summary of your settings will be displayed. Click **Save** to reboot the device and to complete the setup.



After the setup wizard is complete, the following screen will appear. You can now change your mobile device and laptop Wi-Fi settings to the wireless network name and password you just created.



# Playing you Music wirelessly to your Speakers

**NOTE:** Music Everywhere plays music from only one device at a time. To switch devices, stop the current device before playing music on another device.

#### PLAYING YOUR MUSIC WITH APPLE IOS DEVICES

**NOTE:** The below guide is for iOS 7. For more information on how to enable AirPlay on devices using iOS versions earlier than iOS 7, please refer to Apple's support page.

- 1. Make sure Wi-Fi is turned on for your iOS device and that your iOS device is connected to the same network as Music Everywhere.
- 2. Swipe up from the bottom of your screen to access the 'Control Center' function of your device.
- 3. Tap "AirPlay"
- 4. Choose Music Everywhere (DCH-M225) from the list of devices.
- 5. To choose a song to play, press the home button to navigate and now navigate to the music App (or another Airplay enabled music App).



#### PLAYING YOUR MUSIC WITH ANDROID DEVICES

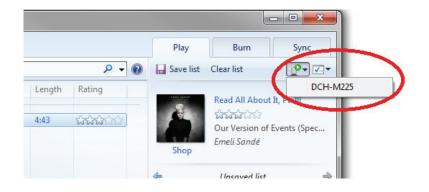
- 1. In order to stream music from an Android smartphone or tablet to Music Everywhere, you will need to download and install an AirPlay or DLNA streaming capable music app, such as BubbleUPnP or iMediaShare.
- 2. Make sure Wi-Fi is turned on for your Android device and that your Android device is connected to the same network as Music Everywhere.
- 3. For instruction on how to stream music from your Android device to Music Everywhere, please refer to the app's user's guide.

**NOTE**: D-Link cannot be held responsible or liable for any direct or consequential damages resulting from the use of third party applications. For more information relating to any third party applications, please refer to the app information on Apple App Store or Google Play, or contact the application developer.

#### PLAYING YOUR MUSIC WITH WINDOWS MEDIA PLAYER

**NOTE**: The below guide is for Windows Media Player version 12. For more information on how to enable the "Play To" function in versions earlier than 12, please refer to Microsoft's support page.

- 1. Make sure your desktop or laptop computer is connected to the same network as Music Everywhere.
- 2. Launch Windows Media Player and make sure it's showing the "Play" tab on the right hand side
- 3. Select music you want to play if you haven't done so already.
- 4. Click the "Play To" button at the top of the "Play" tab and select "DCH-M225".



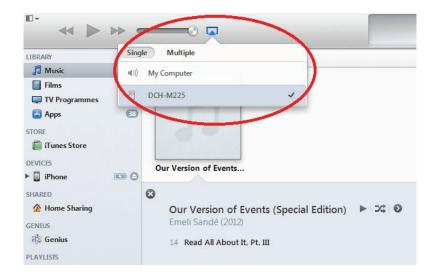
5. In the "Play To" dialog box, use the playback controls to play, pause, or stop the media stream, and to change to the next or previous item in the list.



#### PLAYING YOUR MUSIC WITH ITUNES

**NOTE**: The below guide is for iTunes version 11. For more information on how to enable the "AirPlay" function in versions earlier than 11, please refer to Apple's support page.

- 1. Make sure your desktop or laptop computer is connected to the same network as Music Everywhere.
- 2. Launch iTunes and select the music you want to play if you haven't done so already.
- 3. Click the "AirPlay" icon and select "DCH-M225".



## **Web-based Configuration**

To access the configuration utility for the DCH-M225 on your PC, first connect to the DCH-M225 wirelessly using the Wi-Fi name (SSID) and password located on your Wi-Fi Configuration Card. Then open a web browser and enter **http://dlinkap.local** in the address bar. You can also use the IP address **http://192.168.0.50**.

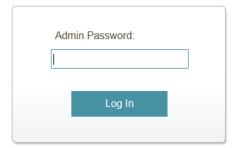
**Note:** If you have multiple DCH-M225 devices on the network, you can access web-based configuration via **http://dlinkapxxxx. local.** as shown in the included Wi-Fi Configuration Card, with "xxxx" being the last four digits of the DCH-M225's MAC address.

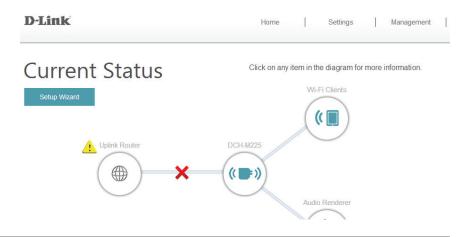
Enter your password. By default, Admin is selected as the username and cannot be changed, and by default, the password is blank.

The configuration interface will open, and you can configure the various settings for the DCH-M225. If you have not yet configured an uplink network, the home screen will show that there is no connection between the DCH-M225 and the uplink router.

For detailed information on manually setting up your DCH-M225 to extend an existing wireless network, refer to "Using the Manual Method" on page 21.

🗅 D-LINK SYSTEMS, INC.   W ×		
G	http://dlinkap.local	





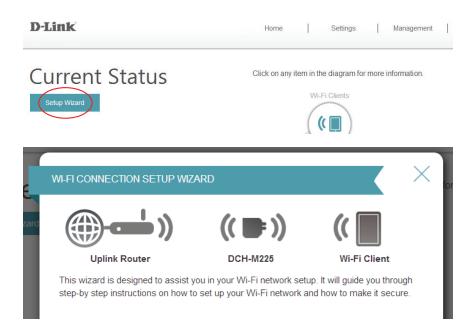
## **Setup Wizard**

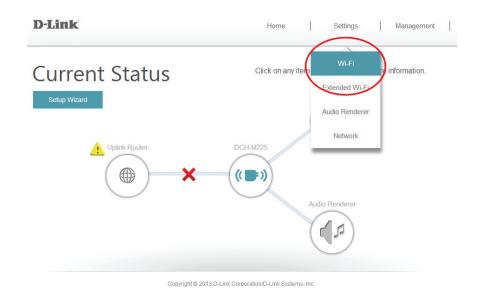
If you wish to configure your extender to connect to the Internet using the setup wizard, click the **Setup Wizard** button.

This wizard is designed to guide you through a step-by-step process to configure your new Music Everywhere to extend your wireless network and connect to the Internet.

Click Next to continue.

If you already have a Wi-Fi network set up and you want to configure your Wi-Fi network settings manually, go to **Settings** at the top of your browser window and select **Wi-Fi** from the drop-down menu (refer to "Wi-Fi Settings" on page 26) to set up the connection between your DCH-M225 and the uplink router. To set up the extended Wi-Fi network, select **Extended Wi-Fi** (refer to "Extended Wi-Fi Settings" on page 27).





Section 3 - Web-based Configuration

Select whether you want to use the WPS (Wi-Fi Protected Setup) method or the manual method to set up an extended wireless network using your DCH-M225 and click **Next**.

If you wish to use the WPS method, please refer to "Using the WPS Method" on page 20.

If you wish to use the manual setup method, please refer to "Using the Manual Method" on page 21.

E	SELECT CONFIGURATION MET	THOD		×
izard	((	<mark>(( 🚍 ))</mark>	((	
	Uplink Router	DCH-M225	Wi-Fi Client	
l	<ul> <li>Select this option if your</li> <li>Setup)</li> <li>Select this option if you</li> </ul>		-	
			Back Ne	ext

## **Using the WPS Method**

To set up using the WPS method, select the first option from the setup wizard menu. Click **Next** to continue.

The DCH-M225 uses the push-button method for WPS. After selecting WPS, the DCH-M225 will ask you to press the WPS push button on the access point or router you want to connect the DCH-M225 to. You have 120 seconds to press the button on your access point or router. Click **Next** to continue.

If a connection has been successfully made, you will see a notice on the screen and the LED on the device will turn solid green.

You can also use the WPS button on the side of the DCH-M225 to initiate a WPS connection with the uplink router. After pressing the WPS button on the DCH-M225, you will have 120 seconds to press the WPS button on your access point or router. The LED on the DCH-M225 will turn solid green when a connection has been successfully established with the uplink router.



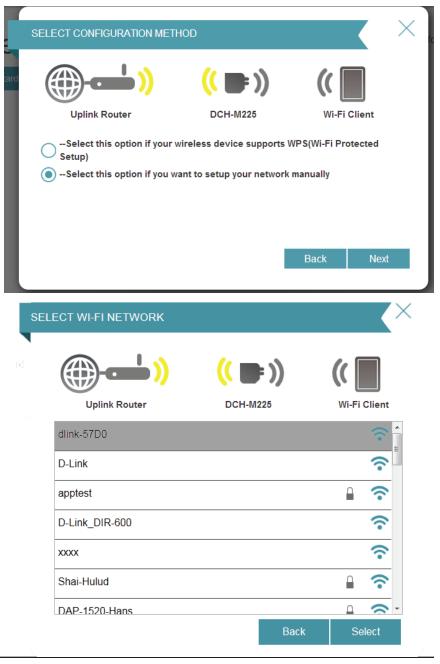


## **Using the Manual Method**

To set up your network manually, select the second option from the setup wizard menu. Click **Next** to continue.

The DCH-M225 will first scan for available Wi-Fi networks and list the networks it has found. If the network you would like to connect to isn't listed, click **Back** and select the manual option again to perform another scan.

Once you have selected the uplink network you wish to use, click **Select**.



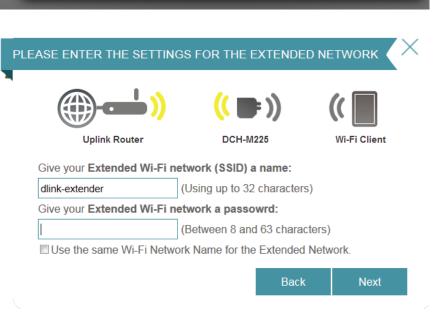
Enter the password for your uplink network.

Click **Next** to continue, or click **Back** to return to the previous step.

ENTER WIFI PASSWORD			
<b>(())</b>	<mark>((</mark> 📑 ))	(( [	
Uplink Router	DCH-M225	Wi-Fi	Client
Please enter Wi-Fi Password to e	stablish wireless connection.		
Wi-Fi Password:			
(Be	etween 8 and 63 characters)		
	_		
		Back	Next

The DCH-M225 will re-broadcast the Wi-Fi connection from the uplink router as an extended Wi-Fi network. Enter the SSID and password that you wish to apply to the extended Wi-Fi network. If you would like the uplink router Wi-Fi network and the extended Wi-Fi network to have the same SSID and password, check the box at the bottom of the screen.

Click **Next** to continue, or click **Back** to return to the previous step.



Section 3 - Web-based Configuration

The setup process is now complete. A summary page will appear showing the settings for both the connection to the uplink router, and the extended Wi-Fi network. It is recommended that you make a record of this information for future reference.

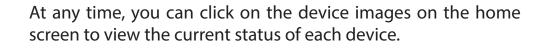
Click **Save** to exit the wizard and return to the home screen.

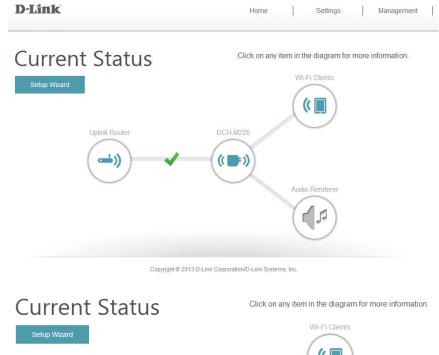
Or, click **Back** to return to the previous step.

# Setup complete Setup complete Image: Setup complete Image:

## **Home Screen**

The home screen gives a summary of the current status of devices connected to the DCH-M225. A green check between devices indicates that there is an active connection. A red X indicates that there is no connection present, or there is a connection error.

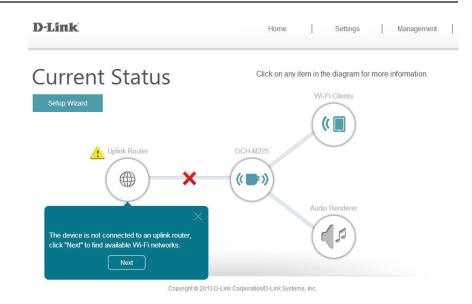




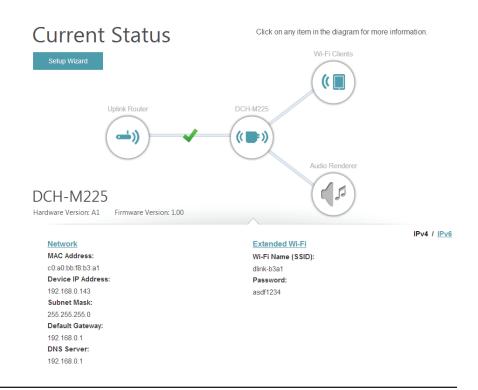


Connect to another uplink router

If there is no connection between the DCH-M225 and the uplink router, you can click on the uplink router icon to search for an available uplink router.



You can view the details of both the uplink router network and the extended Wi-Fi network by clicking on the DCH-M225 icon.



## Wi-Fi Settings

This page lets you configure the Wi-Fi settings to connect your DCH-M225 to another wireless network. This is the uplink network which the DCH-M225 will then be able to extend. To access this page, click on the **Settings** drop-down menu at the top of the page, and select **Wi-Fi**.

Wireless This is set to Repeater mode and cannot be changed. Mode:

Wi-Fi Network Click Scan to scan for available wireless networks and select Name (SSID): the one you want to use the DCH-M225 to extend. You can also type in the name (SSID) of the wireless network.

Security Select the security method that is being used by the wireless Mode: network that you have selected: WEP, WPA-Personal, or None.

**Password:** If you selected WEP or WPA-Personal, you will be required to enter the password or security key for the network you are attempting to join.

You can also use WPS to connect your wireless devices to the DCH-M225's extended network. For further information on how to do this, please refer to "Connecting a Wireless Client" on page 36.

Click **Save** to save the settings and return to the home page.

D-Link		Home	Settings	Management
A	Wi-Fi			
HH H	Use this section to configure the Wi- Survey to scan available Wi-Fi netwo connect to. Enter the Password of th	orks and select the Wi-	Fi Network you would	like your DCH-M225 to
		ie wie metwork you so	ciceted and click dave	
Settings >> Wi-Fi				Save
	Wireless Mode: Repeater	r		
	Wi-Fi Network Name (SSID):		SCAN	
	Security Mode: WPA-P	ersonal 🗸		
	Password:			
	Copyright © 2013 D-Link Co	rporation/D-Link Systems, !	inc.	

## **Extended Wi-Fi Settings**

This page lets you configure the settings for the DCH-M225's extended wireless network. To access this page, click on the **Settings** drop-down menu at the top of the page, and select **Extended Wi-Fi**.

- Wi-Fi Name This is the name of the DCH-M225's extended network. The (SSID): DCH-M225 will rebroadcast the uplink router's Internet connection under this SSID. You can also choose to make the SSID for the extended network the same as the SSID for the uplink network.
  - Security: Select the type of wireless security you wish to use for the extended network. Choose None, WEP, or WPA-Personal.

**Password:** Enter the password or network key that you wish to use **Password:** for the extended network. You can also choose to make the password for the extended network the same as the password for the uplink network.

Click **Save** to save the settings and return to the home page.

D-Link		Home	1 (	Settings	Management	
	Use this section to config	Wi-Fi Settin nure the wireless settings for you cction may also need to be dup	ur D-Link			
Settings >> Extended \	/Vi-Fi				Save	
	Wi-Fi Name(SSID): Security: Password:	dlink-extender WPA-Personal	<b>~</b>			

## **Audio Renderer**

This page lets you configure the settings for the DCH-M225's audio extending feature. To access this page, click on the **Settings** drop-down menu at the top of the page, and select **Audio Renderer**.

DLNA Click to enable or disable the DLNA Renderer feature. When
 Renderer this option is enabled, any DLNA compatible device will be
 Status: able to find the DCH-M225 using the device name that is set in the Device Name field below.

AirPlay Click to enable or disable the AirPlay feature. When this Status: option is enabled, any AirPlay compatible device will be able to find the DCH-M225 using the device name that is set in the **Device Name** field below.

**Device Name:** You can enter a name for your device in this field. Other devices on your network that can stream audio through DLNA or AirPlay will be able to identify your DCH-M225 by this name.

Click **Save** to save the settings and return to the home page.

D-Link		Home	Settings	Management
	Audio Rend DLNA technology allows you to devices. Your music can be str You can also stream music to t	enjoy your media anywhere, ar eamed wirelessly from DLNA-c	ertified DMS (Digital N	ledia Server) devices.
Settings >> Audio Rend	erer			Save
	AirPlay Status:	nabled CH-M225		
	Copyright © 2013 D-L	ink Corporation/D-Link Systems, Inc.		

## **Network Settings**

This page lets you configure the network settings for the DCH-M225. To access this page, click on the **Settings** drop-down menu at the top of the page, and select **Network**. Click **Save** at any time to save the changes you have made on this page.

<b>Device Name:</b>	You can change the name of the device by editing the text in
	the text box. If you change the name of the device, you will
	need to enter "http://xxxx.local." (where "xxxx" corresponds
	to the name of the device) in the address bar of your web
	browser in order to access the configuration utility.

Settings >> Network Save	Network Settings	Management Link: http:// dlinkap .local.	Advanced Settings
Settings >> Network Save			
	Settings >> Network		Save

#### **Advanced Settings**

The **Advanced Settings** section of the Network Settings page allows you to configure both IPv4 and IPv6 settings which will be used by the DCH-M225's extended network.

IPv4 Device Management interface - You can select either a Dynamic or Static IPv4 configuration:

My LAN Here you can select whether you want the IP to have a Connection is: Dynamic IP or Static IP address. If you select Dynamic IP, the options below will not be available.

**IP Address:** Enter the Static IP address that you want to assign to the extended network AP. This address should be outside of the uplink router's DHCP address pool.

Subnet Mask: Enter the subnet mask.

**Gateway** Enter the gateway address. This is usually the IP address of **Address:** the uplink router.

**Primary DNS** Enter the address of the primary DNS server. Server:

**Secondary** Enter the address of the secondary DNS server. This is **DNS Server:** optional but will provide backup if the primary server fails.

IPv4 Device Management Interface Choose a IPv4 provisioning mechanism to be used by the AP.			
My LAN Connection is:	Dynamic IP (DHCP)		
IP Address:	192.168.0.50		
Subnet Mask:	255.255.255.0		
Gateway Address:	0.0.0.0		
Primary DNS Server:	0.0.0.0		
Secondary DNS Server:	0.0.0.0		

#### IPv6 Device Management Interface - You can select an Autoconfiguration (dynamic), Static IP, or Link-local IPv6 configuration:

My IPv6 Select Autoconfiguration (SLAAC/DHCPv6) to have the Connection is: DCH-M225 automatically receive an IPv6 address from the uplink router.

**Obtain DNS** You can select to obtain IPv6 DNS server information **Server Address:** automatically, or you can select to configure DNS servers manually.

- Primary DNS Enter the primary IPv6 DNS server address. Server:
- **Secondary DNS** Enter the secondary IPv6 DNS server address. This is optional **Server:** but will provide backup if the primary server fails.

My IPv6	Select Static IPv6 to manually assign an IP address to the
Connection is:	DCH-M225.

- **IPv6 Address:** Enter the IPv6 address that you want to assign to the extended network AP. This address should be outside of the uplink router's DHCP address pool.
- Subnet Prefix Enter the length of the IPv6 subnet prefix. Length:

**Default Gateway:** Enter the default gateway.

- Primary DNS Enter the primary IPv6 DNS server address. Server:
- **Secondary DNS** Enter the secondary IPv6 DNS server address. This is optional **Server:** but will provide backup if the primary server fails.

IPv6 Device Management Interface	
Choose a IPv6 provisioning mechanism to be used by t	he AP.
My IPv6 Connection is:	Autoconfiguration (SLAAC/DHCPv6)
Obtain a DNS server address automatically or enter a s	pecific DNS server address.
	_
	Obtain IPV6 DNS Servers automatically
	Use the following IPv6 DNS Servers
	<u> </u>
Primary DNS Server:	
,	
Secondary DNS Server:	

#### IPv6 Device Management Interface

Choose a IPv6 provisioning mechanism to be used by the AP.

My IPv6 Connection is: Static IPv6	$\checkmark$
------------------------------------	--------------

Enter the IPv6 address information that you would like to use to access the Web-based management interface.

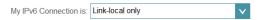
IPv6 Address:	
Subnet Prefix Length:	
Default Gateway:	
Primary DNS Server:	
Secondary DNS Server:	

**My IPv6** Select **Link-local only** to only set an IPv6 address for the **Connection is:** local network.

LAN IPv6 Link- The link-local address of the DCH-M225. Local Address:

#### IPv6 Device Management Interface

Choose a IPv6 provisioning mechanism to be used by the AP.



The LAN IPv6 Link-Local Address is the IPv6 Address that you use to access the Web-based management interface.

LAN IPv6 Link-Local Address: FE80::CABE:19FF:FEE5:1411/64

## Maintenance Admin

This page will allow you to set a new password for the administrator account used to configure the DCH-M225. You can also enable graphical authentication (CAPTCHA) on this page. To access this page, click on the **Management** drop down menu at the top of the page, and select **Admin**. Click **Save** at any time to save the changes you have made on this page.

Admin Enter the Admin password. Password:

**Enable** Click on the slider to enable graphical authentication, **Graphical** or CAPTCHA. This provides an extra layer of security by **Authentication:** requiring you to enter a code that is displayed on-screen. This can help prevent unauthorized users from gaining access to your wireless network using automated methods.

D-Link		Home	1	Settings	Т	Management
Adr	nin					
	The admin password is used to log in to this configuration interface. It is highly recommended that you create a password to keep your router secure.					
Management >> Admin						Save
	dmin Password:					

## System

This page allows you to save or restore your system configuration, reset or reboot the DCH-M225. To access this page, click on the **Management** drop down menu at the top of the page, and select **System**. Click **Save** at any time to save the changes you have made on this page.

Save Settings	Save the system settings into a file to the local hard drive.	1
To Local Hard	You will then see a file dialog where you can select a location	
Drive:	and file name for the settings.	
	Less dates such as setting as for more file and the set hand doing	

Load Settings Load the system settings from a file on the local hard drive. From Local Hard Drive:

Restore Restore the system settings to factory default settings. This to Factory will erase all currently stored settings. Default

Settings:

**Reboot the** Click **Reboot** to reboot the DCH-M225. **Device:** 

D-Link	Home	Settings Management
router to fact	Syou save your router's current settings to a file, ny default settings, or reboot the device. Please r rase all settings, including any rules you have cre	note that restoring the settings to the factory
Save Settings To Local Hard Dri	e: Save	
Load Settings From Local Hard Dri	e: Select File	
Restore To Factory Default Settin	is: Restore	
Reboot The Devi	e: Reboot	

Copyright © 2013 D-Link Corporation/D-Link Systems, Inc.

## Upgrade

Firmware upgrades may be provided for the DCH-M225 in future. You can check for and upgrade your firmware on this page. To access this page, click on the **Management** drop down menu at the top of the page, and select **Upgrade**.

**Firmware** This section displays the currently installed firmware version, **Information:** as well as the date on which the current firmware version was released.

Check For New Click Check For New Firmware to find out if there is new or Firmware: updated firmware. If there is, you can download it to your computer.

**Upgrade** Click **Select File** to locate the firmware file on your local **Firmware:** device and perform a manual firmware upgrade.

D-Link		Home		Settings	Management	
FW	Upgrade					
	This page shows you your current firmware version, and allows you to check for and download new firmware. After downloading the firmware, you can then upgrade it by using the buttons below.					
Management >> Upgr	ade					
Firmware Information						
Current Firmware Version:	1.00, Mon 11 Nov 2013					
Current Firmware Date: 2	2013-11-11 12:15:00					
		- I	Check f	or New Firmware		
Upgrade Manually						
	Upgrade Firmware: Se	lect File				

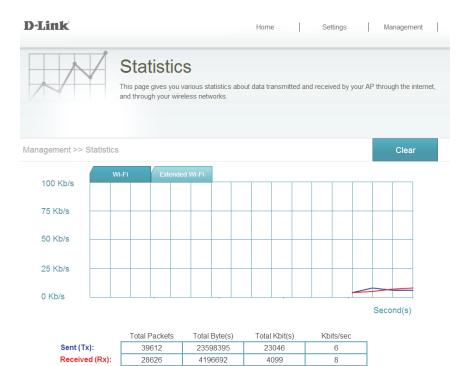
Copyright © 2013 D-Link Corporation/D-Link Systems, Inc.

## **Statistics**

This page displays details about your wireless and network connections. To access this page, click on the **Management** drop down menu at the top of the page, and select **Statistics**.

- Wi-Fi: Click on the Wi-Fi tab to display the statistics for the connection between the DCH-M225 and the uplink router.
- **Extended** Click on the **Extended Wi-Fi** tab to display the statistics for **Wi-Fi**: the connection between the DCH-M225 and any connected clients.

Clear: Click the Clear button to reset the statistics.



# **Connecting a Wireless Client** WPS Button

WPS (Wi-Fi Protected Setup) is a simple and secure way to connect your wireless devices with the DCH-M225. Most wireless devices such as wireless routers, media players, printers, and cameras will have a WPS button (or a software utility with WPS) that you can press to connect to the DCH-M225. Please refer to the user manual for the wireless device you want to connect to make sure you understand how to enable WPS. Once you know, follow the steps below:

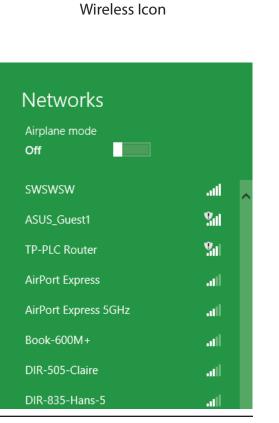
- **Step 1** Press the WPS button on the DCH-M225 for about 3 seconds. The LED on the device will start to blink. You can also use the WPS option in the setup wizard section of the web interface.
- **Step 2** Within 120 seconds, press the WPS button on your wireless device.
- **Step 3** Allow up to 1 minute to configure. Once the LED light stops blinking and turns solid green, you will be connected and your wireless connection will be secured with WPA2.

## Connect to a Wireless Network Windows® 8 WPA/WPA2

It is recommended to enable wireless security (WPA/WPA2) on your wireless router or access point before configuring your wireless adapter. If you are joining an existing network, you will need to know the security key (Wi-Fi password) being used.



Clicking on this icon will display a list of wireless networks which are within connecting proximity of your computer. Select the desired network by clicking on the network name.



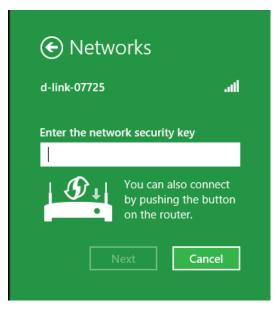
11:35 AM

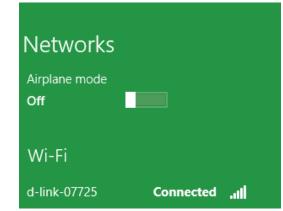
1/21/2013

You will then be prompted to enter the network security key (Wi-Fi password) for the wireless network. Enter the password into the box and click **Next**.

If you wish to use Wi-Fi Protected Setup (WPS) to connect to the router, you can also press the WPS button on your router at this point to enable the WPS function.

When you have established a successful connection with a wireless network, the word **Connected** will appear next to the name of the network to which you are connected.





## Windows<sup>®</sup> 7 WPA/WPA2

It is recommended to enable wireless security (WPA/WPA2) on your wireless router or access point before configuring your wireless adapter. If you are joining an existing network, you will need to know the security key or passphrase being used.

1. Click on the wireless icon in your system tray (lower-right corner).

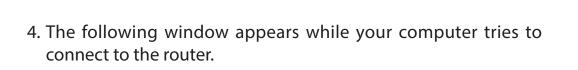


2. The utility will display any available wireless networks in your area.



3. Highlight the wireless network (SSID) you would like to connect to and click the **Connect** button.

If you get a good signal but cannot access the Internet, check your TCP/IP settings for your wireless adapter. Refer to the Networking Basics section in this manual for more information.





Not connected

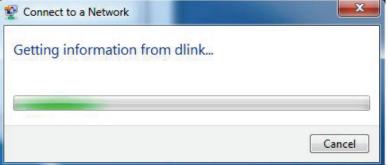
հ

dlink

ALPHA

dlink 888

44



Section 4 - Connecting a Wireless Client

5. Enter the same security key or passphrase that is on your router and click **Connect**.

It may take 20-30 seconds to connect to the wireless network. If the connection fails, please verify that the security settings are correct. The key or passphrase must be exactly the same as on the wireless router.

Connect to a Network				
Type the network security key				
Security key:				
Hide characters				
You can also connect by pushing the button on the router.				
OK Cancel				

## Windows Vista®

Windows Vista<sup>®</sup> users may use the built-in wireless utility. If you are using another company's utility or Windows<sup>®</sup> 2000, please refer to the user manual of your wireless adapter for help with connecting to a wireless network. Most utilities will have a "site survey" option similar to the Windows Vista<sup>®</sup> utility as seen below.

If you receive the "Wireless Networks Are Available" bubble, click on the center of the bubble to access the utility.

or

Right-click on the wireless computer icon in your system tray (lower-right corner next to the time). Select **Connect to a network**.

The utility will display any available wireless networks in your area. Click on a network (displayed using the SSID) and click **Connect**.

If you get a good signal but cannot access the Internet, check the TCP/ IP settings for your wireless adapter. Refer to "Troubleshooting" on page 48 for more information.





### WPA/WPA2

It is recommended to enable wireless security (WPA/WPA2) on your wireless router or access point before configuring your wireless adapter. If you are joining an existing network, you will need to know the security key or passphrase being used.

1. Open the Windows Vista<sup>®</sup> Wireless Utility by right-clicking on the wireless computer icon in your system tray (lower right corner of screen). Select **Connect to a network**.

2. Highlight the wireless network (SSID) you would like to connect to and click **Connect**.





3. Enter the same security key or passphrase that is on your router and click **Connect**.

It may take 20-30 seconds to connect to the wireless network. If the connection fails, please verify that the security settings are correct. The key or passphrase must be exactly the same as on the wireless router.

Туре	the network security key or passphrase for Candy
The p	erson who setup the network can give you the key or passphrase.
Securi	ity key or passphrase:
Dis Dis	splay characters
Ĩ	If you have a <u>USB flash drive</u> with network settings for Candy, insert it now.

### Windows® XP

Windows<sup>®</sup> XP users may use the built-in wireless utility (Zero Configuration Utility). The following instructions are for Service Pack 2 users. If you are using another company's utility, please refer to the user manual of your wireless adapter for help with connecting to a wireless network. Most utilities will have a "site survey" option similar to the Windows<sup>®</sup> XP utility as seen below.

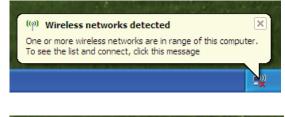
If you receive the **Wireless Networks Detected** bubble, click on the center of the bubble to access the utility.

or

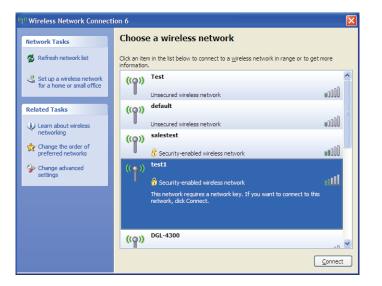
Right-click on the wireless computer icon in your system tray (lower-right corner next to the time). Select **View Available Wireless Networks**.

The utility will display any available wireless networks in your area. Click on a network (displayed using the SSID) and click the **Connect** button.

If you get a good signal but cannot access the Internet, check your TCP/ IP settings for your wireless adapter. Refer to the **Networking Basics** section in this manual for more information.







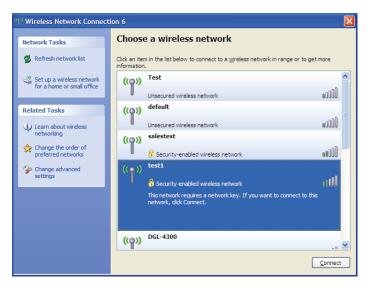
### WPA/WPA2

It is recommended to enable WPA on your wireless router or access point before configuring your wireless adapter. If you are joining an existing network, you will need to know the WPA key being used.

1. Open the Windows<sup>®</sup> XP Wireless Utility by right-clicking on the wireless computer icon in your system tray (lower-right corner of screen). Select **View Available Wireless Networks**.

2. Highlight the wireless network (SSID) you would like to connect to and click **Connect**.





Section 4 - Connecting a Wireless Client

3. The **Wireless Network Connection** box will appear. Enter the WPA-PSK passphrase and click **Connect**.

It may take 20-30 seconds to connect to the wireless network. If the connection fails, please verify that the WPA-PSK settings are correct. The WPA-PSK passphrase must be exactly the same as on the wireless router.

Wireless Network Connection						
The network 'test1' requires a network key (also called a WEP key or WPA key). A network key helps prevent unknown intruders from connecting to this network.						
Type the key, and then click Connect.						
Network <u>k</u> ey:	1					
Confirm network key:						
	<u>C</u> onnect Cancel					

# Troubleshooting

This section provides solutions to problems that can occur during the installation and operation of the DCH-M225. Read the following descriptions if you are having problems. The examples below are illustrated in Windows<sup>®</sup> XP. If you have a different operating system, the screenshots on your computer will look similar to the following examples.

### 1. Why can't I access the web-based configuration utility?

When entering the IP address of the Music Everywhere (dlinkap.local for example), you are not connecting to a website nor do you have to be connected to the Internet. The device has the utility built-in to a ROM chip in the device itself. Your computer must be on the same IP subnet to connect to the web-based utility.

- Make sure you have an updated Java-enabled web browser. We recommend the following:
  - Internet Explorer 7 or later
  - Firefox 12.0 or later
  - Safari 4 or later
  - Google Chrome 20.0 or later
- Make sure that you are connected to the same wireless network which is listed on the base of the DCH-M225. If you have an active wired LAN Ethernet connection, try temporarily unplugging the Ethernet cable from the computer you are using, as this may eliminate possible conflicts from having two simultaneous connections on the same computer.
- Disable any Internet security software running on the computer. Software firewalls such as ZoneAlarm, BlackICE, Sygate, Norton Personal Firewall, and Windows<sup>®</sup> XP firewall may block access to the configuration pages. Check the help files included with your firewall software for more information on disabling or configuring it.

- Configure your Internet settings:
  - Go to Start > Settings > Control Panel. Double-click the Internet Options Icon. From the Security tab, click the button to restore
    the settings to their defaults.
  - Click the **Connection** tab and set the dial-up option to Never Dial a Connection. Click the LAN Settings button. Make sure nothing is checked. Click **OK**.
  - Go to the **Advanced** tab and click the button to restore these settings to their defaults. Click **OK** three times.
  - Close your web browser (if open) and open it.
- Access the web management interface. Open your web browser and enter the address of your extender (http://dlinkap. local) in the address bar. This should open the login page for your web management. If the DCH-M225 is not connected to an uplink router, you can try accessing the web interface using the default IP address http://192.168.0.50.
- If you still cannot access the configuration, unplug the extender from the power outlet for at least 10 seconds and plug it back in. Wait about 30 seconds and try accessing the configuration. If you have multiple computers, try connecting using a different computer.

### 2. What can I do if I forgot my password?

If you forgot your password, you must reset your extender. Unfortunately this process will change all your settings back to the factory defaults.

To reset the extender, locate the reset button (hole) on the underside panel of the unit. With the extender powered on, use a paperclip to hold the button down for 10 seconds. Release the button and the extender will go through its reboot process (indicated by the LED turning red). Wait about 30 seconds to access the extender. The default IP address is **http://dlinkap. local**. When logging in, the username is **admin** and leave the password box empty.

## **Wireless Basics**

D-Link wireless products are based on industry standards to provide easy-to-use and compatible high-speed wireless connectivity within your home, business or public access wireless networks. Strictly adhering to the IEEE standard, the D-Link wireless family of products will allow you to securely and conveniently access your network. You will be able to enjoy the freedom that wireless networking delivers.

A wireless local area network (WLAN) is a cellular computer network that transmits and receives data with radio signals instead of wires. Wireless LANs are used increasingly in both home and office environments, and public areas such as airports, coffee shops and universities. Innovative ways to utilize WLAN technology are helping people to work and communicate more efficiently. Increased mobility and the absence of cabling and other fixed infrastructure have proven to be beneficial for many users.

Wireless users can use the same applications they use on a wired network. Wireless adapters used on laptop and desktop systems support the same protocols as Ethernet adapter cards.

Under many circumstances, it may be desirable for mobile network devices to link to a conventional Ethernet LAN in order to use servers, printers or an Internet connection supplied through the wired LAN. A wireless router is a device used to provide this link.

### Tips

Here are a few things to keep in mind when you are installing your Music Everywhere.

### Centralize the extender's location

For best performance, make sure you place the extender in a centralized location within your desired usage area. Try to place the extender so that there are minimal obstructions between it and the uplink router. If possible, use an elevated power outlet, so the signal can be dispersed more easily. If you have a large home or usage area, you may need several extenders in order to achieve optimal coverage.

### **Eliminate Interference**

Place home appliances such as cordless telephones, microwaves, and televisions as far away as possible from the extender. This can significantly reduce any interference that the appliances might cause since they operate on same frequency.

### Security

Don't let your neighbors or intruders connect to your wireless network. Secure your wireless network by utilizing the WPA or WEP security feature on the extender and uplink router. Refer to the relevant sections of this manual for further details.

# **Technical Specifications**

#### Standards

- IEEE 802.11n
- IEEE 802.11g
- IEEE 802.11b

### Wireless Frequency Range<sup>1</sup>

• 2.4 GHz to 2.4835 GHz

#### Antenna

Two Internal Antennas

### Security

- Wi-Fi Protected Access (WPA/WPA2)
- WPS<sup>™</sup> (PBC)
- Wired Equivalent Privacy (WEP) 64/128-bit

### **Advanced Features**

QRS Mobile setup app for iOS and Android devices

### **Device Management**

• Web UI

### **Diagnostic LEDs**

• Status/WPS

### **Operating Temperature**

• 0 to 40 °C (32 to 104 °F)

### **Operating Humidity**

• 0% to 90% non-condensing

### **Power Input**

• AC 110-240 V

#### **Maximum Power Consumption**

• 5 W

### Certifications

- FCC
- CE
- IC
- C-Tick
- CSA
- Wi-Fi Certified

### Dimensions

• 54 x 42 x 54.5 mm (2.13 x 1.65 x 2.15 inches)

### Weight

• 81.2 grams (0.18 lb)

<sup>1</sup> Frequency range varies depending on local regulations